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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,552	01/07/2002	Gary Gloceri	10541-822	2455
29074	7590	04/22/2004	EXAMINER	
VISTEON 29074			TO, TOAN C	
BRINKS HOFER GILSON & LIONE			ART UNIT	PAPER NUMBER
P.O. BOX 10395				3616
CHICAGO, IL 60611				

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/040,552	GLOCERI ET AL.	
	Examiner Toan C To	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 January 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 and 20-23 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8, 20-23 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 and 20-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 2-3, claiming "standardized for use in vehicle exhaust systems" is unclear. It is unclear to claim a vehicle structure with respect to a different and uninvolved device (exhaust system). Furthermore, it is unclear for the reason that there is in the present, past and future, no same "standard" tube in a vehicle exhaust system. Standards change. It is also unclear for the reason that "standards" vary from place to place and application to application

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunert et al. (USPN 6,511,096) in view of Wycech (USPN 6,233,826) in view of JP405278049A.

Kunert et al. disclose a suspension subframe for a vehicle comprising a plurality of metal tubes affixed to each other Kunert et al. disclose (see col. 3, lines 63-64) that a light metal can be used. This teaches the importance of a lightweight subframe arrangement.

Wycech discloses inserting epoxy and urethane resins (col. 4, lines 46-48) within a metal tube at predetermined locations and localized at specific points to reinforce the structural strength of the tube and allow for decreased dimension of the tube and decreased weight of the tube with respect to simply increasing the dimensions of a structural tube to accomplish the desired increase in structural strength (col. 1, 23-27) while also reducing costs This "foam" is placed within the tube as a "cartridge" and able to be cured with the metal tubes.

JP405278049A discloses a structural foam being sprayed into a hollow vehicle member.

With respect to the gauge of the tubes being "less than 2 mm" and "between .9 mm and 1.8 mm" and "about 1.5 mm" (claims 2-4 and ``), it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a tube with these dimensions since it has been held that where the general conditions of a claim are disclosed in the prior art (the teachings Kuvert et al. and Wycech to reduce the dimensions of the tube and reinforce the tubes with foam to provide a strong and lightweight subframe), discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

It would have been obvious to one of ordinary skill in the-art at the time the invention was made to modify the suspension structure of Kuvert et al. by inserting a reinforcing structural epoxy resin based foam in cartridge form as taught by Wycech or by spraying the foam as taught by JP405278049A and further optimize the dimensions of the metal tubes in order to increase strength and shock absorption.

Response to Arguments

5. Applicant's arguments filed January 21, 2004 have been fully considered but they are not persuasive with the following reasons:

In response to applicant's argument regarding the rejection of claims 1-8 and 20-23 under 35 U.S.C 112 second paragraph, it is noted that in view of applicant's admission of "while no exact, official standard exists for vehicle exhaust system, it is standard in the industry for a tube for an exhaust system to be lighter and of smaller gauge than an equivalent length of suspension subframe tubing", the claim is even more unclear.

Applicant argued that the rejections of the claims under 35 U.S.C 103(a) is improper for the reasons that "Kunert does not disclose a suspension support for an entire vehicle. Further Kunert does not disclose the use of vehicle exhaust system tubes to construct the rear suspension", the examiner respectfully disagree because (1) an argument of "a suspension support for an entire vehicle" is not commensurate with the scope of the claims. (2) subject matter as to "vehicle exhaust system tube" renders the claims indefinite for being unclear with the reason indicated above.

In response to applicant's argument that there is no suggestion to combine the references such as Kunert in view of Wycech or Kato, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Wycech and Kato teach of reinforcing the metal tube by inserting or spraying foam material into the tube, therefore it would be obvious to one having ordinary skill in the art to use teaching of Wycech and Kato in suspension subframe as to Kunert.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan C To whose telephone number is (703) 306-5951. The examiner can normally be reached on Mon-Fri (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT
To
April 15, 2004


PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600
4/15/04